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EXAMINER	
BELL, MELTIN	

ART UNIT	PAPER NUMBER
2121	8

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/754,179	Applicant(s) NELKEN ET AL.	
	Examiner Meltin Bell	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-82 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-82 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 23 February 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. This action is in response to the solicitation for reconsideration filed 2/23/04 in application 09/754,179.

2. Specification amendments (page 25, line 10; page 25, line 18; page 26, line1; page 26, line 12; page 27, line 7; page 27, line 15) filed by the applicant have been entered.

3. Original, previously presented and currently amended claims 1-82 filed by the applicant have been entered.

4. In response to the applicant's arguments stated in the remarks:

I.) Applicant's amendment of claims 1, 41, 55, 63, 78 and 82 overcomes the lack of utility and enablement rejections of the prior office action.

II.) Objections -

A.) Applicant's amendment of the specification as well as Figs. 2 and 4 overcome objections of the prior office action:

B.) Applicant's amendment of claims 63 and 77-78 overcomes the failure to identify the purpose or function and claim numbering objections of the prior office action.

III.) Rejections Under 101 -

A.) Applicant's amendment of independent claims 41, 55, 63, 78 and 82 satisfy the utility requirement of 101. Accordingly, the 101 rejections of the prior office action are withdrawn based on non-statutory claims reciting abstract ideas not applied in the technological arts.

IV.) Rejections Under 112 –

A.) Applicant's amendment of independent claims 41, **55**, 63 and 78 complies with the enablement and utility requirements under 112, first paragraph (112-1st) thereby rendering the 112-1st rejections of the prior office action moot.

B) Applicant's renumbering of claim 77 overcomes the antecedent basis rejection under 112, second paragraph (112-2nd) justifying withdrawal of the prior office action's rejection.

V.) Rejections Under 103 -

A.) Currently amended independent claim 1 and original dependent claims 2-40 have been considered, but they are not persuasive. These claims stand rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,867,495 to *Elliott et al* in view of USPN 5,371,807 to *Register et al* in further view of USPN 5,878,385 to *Bralich et al* and further in view of USPN 5,745,652 to *Bigus*.

As to currently amended claim 1, the applicant argues that the cited references fail to disclose:

i.) a contact center

ii.) a modeling engine using feedback

iii) analysis of customer calls received by the customer contact center (e.g. analysis of communications received by the contact center)

iv.) identifying key concepts in email communications (e.g. determine an intent of the received communication)

In response to applicant's argument,

i.) It was noted that *Elliott et al* teaches a customer service center that sends and receives communications (column 197, lines 7-14, "The CAP 10235...customer service center"). Therefore, the contact center limitation is met by the reference.

ii.) It was noted that *Register et al* teaches a modeling engine using feedback (Figs. 2 and 3; column 3, lines 37-51, "The system of...the categories selected"). It is also noted that *Bigus* teaches a modeling engine using feedback (Figs. 2, 4 and 5A). Therefore, the modeling engine limitation is met by the references.

iii.) It is noted that *Elliott et al* teaches analysis of customer calls received by the customer contact center (column 22, lines 13-22, "Call Context Server...against the data"; column 22, lines 29-35, "Analysis Services 2144...fraud detection and customer traffic statistics"). Therefore, the analysis of communications received by the contact center limitation is met by the reference.

iv.) It is noted that *Elliott et al* teaches identifying key concepts in email communications (column 68, lines 14-23, "3. Text to Speech...to be played"). Therefore, the determine an intent of the received communication limitation is met by the reference.

B.) Currently amended independent claim 41 and original dependent claims 42-54 have been considered, but they are not persuasive. These claims stand rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,867,495 to *Elliott et al* in view of USPN 5,371,807 to *Register et al,* in further view of USPN 5,878,385 to *Bralich et al* and in further view of USPN 5,890,142 to *Tanimura et al.*

As to currently amended claim 41, the applicant argues that the cited references fail to disclose:

i.) analyzing the communication at a computer attached to the computer network to determine an intent

ii.) predicting a response to the communication based on the intent, producing a predicted response

iii.) preparing a response to the communication, producing an actual response

iv.) comparing the actual response to the predicted response to improve subsequent predictions

In response to applicant's argument,

i.) It is noted that *Elliott et al* teaches analyzing the communication at a computer attached to the computer network to determine an intent (Figs. 3, 10B, 10A; Abstract, "Telephone calls, data...over the internet"; column 22, lines 13-22, "Call Context Server...against the data"; column 22, lines 29-35, "Analysis Services 2144...fraud detection and customer traffic statistics"; column 68, lines 14-23, "3. Text to Speech...to be played"). Therefore, the analyzing the communication at a computer attached to the computer network to determine an intent limitation is met by the reference.

ii.) It was noted that *Tanimura et al* teaches predicting a response to the communication based on the intent, producing a predicted response (column 1, lines 53-58, "The monitoring apparatus...data storage section"). Therefore, the predicting a response to the communication based on the intent, producing a predicted response limitation is met by the reference.

iii.) It was noted that *Tanimura et al* teaches preparing a response to the communication, producing an actual response (column 1, lines 66-67, "since the abnormality...range which is"; column 2, lines 1-4, "determined from a...the observation system"). Therefore, the preparing a response to the communication, producing an actual response limitation is met by the reference.

iv.) It is noted that *Tanimura et al* teaches comparing the actual response to the predicted response (column 1, lines 58-65, "The predicting section...the compared result") while *Register et al* teaches improving subsequent predictions (Figs. 2 and 3; column 3, lines 37-51, "The system of...the categories selected"). Therefore, the comparing the actual response to the predicted response to improve subsequent predictions limitation is met by the references.

C.) Currently amended independent claim 55 has been considered, but is not persuasive. The claim stands rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,867,495 to *Elliott et al* in view of USPN 5,371,807 to *Register et al* in further view of USPN 5,878,385 to *Bralich et al* and further in view of USPN 5,745,652 to *Bigus*.

As to currently amended claim 55, the applicant argues that the cited references fail to disclose:

i.) receiving the relationship event and analyzing the relationship event to identify concepts in the relationship event

ii.) building an event model of the relationship event using the concepts

In response to applicant's argument,

i.) The applicant's definition of relationship events is noted on page 9, lines 19-20 of the present application: any communications between the organization and other external or internal entities. It is further noted that *Elliott et al* teaches receiving such a relationship event and analyzing the relationship event to identify concepts in the relationship event (Figs. 3, 10B, 10A; Abstract, "Telephone calls, data...over the internet"; column 22, lines 13-22, "Call Context Server...against the data"; column 22, lines 29-35, "Analysis Services 2144...fraud detection and customer traffic statistics"; column 68, lines 14-23, "3. Text to Speech...to be played").

Therefore, the receiving the relationship event and analyzing the relationship event to identify concepts in the relationship event limitations are met by the reference.

ii.) It is noted that *Bigus* teaches building an event model of the relationship event (Figs. 2, 4 and 5A) while *Elliott et al* teaches using the concepts (column 68, lines 14-23, "3. Text to Speech...to be played"). Therefore, the building an event model of the relationship event using the concepts limitation is met by the references.

D.) Currently amended independent claim 63 and previously presented dependent claims 64-72 have been considered, but are not persuasive. The claims stand rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,867,495 to *Elliott et al* in view of USPN 5,371,807 to *Register et al* in further view of USPN 5,878,385 to *Bralich et al* in further view of USPN 5,745,652 to *Bigus* in further view of USPN 5,493,677 to *Balogh et al* and in further view of USPN 5,890,142 to *Tanimura et al.*

As to currently amended claim 63, the applicant argues that the cited references fail to disclose:

i.) analyzing the content of the communication to identify at least one concept of the communication

ii.) creating a model of the communication using the at least one concept

iii.) comparing the model of the communication to a set of adaptive models to produce a predicted response to the communication, preparing an actual response to the communication and comparing the predicted response and the actual response to produce feedback

In response to applicant's argument,

i.) It is noted that *Elliott et al* teaches analyzing the content of the communication to identify at least one concept of the communication (Figs. 3, 10B, 10A; Abstract, "Telephone calls,

data...over the internet"; column 22, lines 13-22, "Call Context Server...against the data"; column 22, lines 29-35, "Analysis Services 2144...fraud detection and customer traffic statistics"; column 68, lines 14-23, "3. Text to Speech...to be played"). Therefore, the analyzing the content of the communication to identify at least one concept of the communication limitation is met by the reference.

ii.) It is noted that *Bigus* teaches creating a model of the communication (Figs. 2, 4 and 5A) while *Elliott et al* teaches using the at least one concept (column 68, lines 14-23, "3. Text to Speech...to be played"). Therefore, the creating a model of the communication using the at least one concept limitation is met by the references.

iii.) It is noted that *Bigus* teaches adaptive model(s) of the communication using feedback (Figs. 2, 4 and 5A) while *Register et al* teaches model(s) with feedback and comparing models in the form of knowledge base categories (Figs. 2 and 3; Abstract, sentences 4-8, "Next, a numeric...text classification system"; column 3, lines 37-51, "The system of...the categories selected") and *Tanimura et al* teaches predicting responses to the communication, preparing an actual response to the communication and comparing the predicted response and the actual response to produce feedback (Fig. 1; column 1, lines 53-67, "The monitoring apparatus...range which is"; column 2, lines 1-4, "determined from a...the observation system"). Therefore, the comparing the model of the communication to a set of adaptive models to produce a predicted response to the communication, preparing an actual response to the communication and comparing the predicted response and the actual response to produce feedback limitations are met by the references.

E.) Currently amended independent claim 78 and previously presented dependent claims 79-81 have been considered, but are not persuasive. The claims stand rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,867,495 to *Elliott et al* in view of USPN 5,371,807 to *Register et al* in further view of USPN 5,878,385 to *Bralich et al* in further view of USPN 5,745,652 to *Bigus* in further view of USPN 5,493,677 to *Balogh et al* and in further view of USPN 5,890,142 to *Tanimura et al.*

As to currently amended claim 78, the applicant argues that the cited references fail to disclose:

i.) creating a model of the communication

ii.) comparing the model of the communication to a set of adaptive models to produce a predicted action in response to the communication and comparing the predicted action with an actual action in response to the communication to produce feedback

In response to applicant's argument,

i.) It is noted that *Elliott et al* teaches analyzing the content of the communication to identify at least one concept of the communication (Figs. 3, 10B, 10A; Abstract, "Telephone calls, data...over the internet"; column 22, lines 13-22, "Call Context Server...against the data"; column 22, lines 29-35, "Analysis Services 2144...fraud detection and customer traffic statistics"; column 68, lines 14-23, "3. Text to Speech...to be played"). Therefore, the analyzing the content of the communication to identify at least one concept of the communication limitation is met by the reference.

ii.) It is noted that *Bigus* teaches creating a model of the communication (Figs. 2, 4 and 5A) while *Elliott et al* teaches using communications (Figs. 3, 10B, 10A; Abstract, "Telephone calls, data...over the internet"; column 22, lines 13-22, "Call Context Server...against the data";

column 22, lines 29-35, "Analysis Services 2144...fraud detection and customer traffic statistics"; column 68, lines 14-23, "3. Text to Speech...to be played"). Therefore, the creating a model of the communication limitation is met by the references.

ii.) It is noted that *Bigus* teaches adaptive model(s) of the communication using feedback (Figs. 2, 4 and 5A) while *Register et al* teaches model(s) with feedback and comparing models in the form of knowledge base categories (Figs. 2 and 3; Abstract, sentences 4-8, "Next, a numeric...text classification system"; column 3, lines 37-51, "The system of...the categories selected") and *Tanimura et al* teaches predicting responses to the communication, preparing an actual response to the communication and comparing the predicted response and the actual response to produce feedback (Fig. 1; column 1, lines 53-67, "The monitoring apparatus...range which is"; column 2, lines 1-4, "determined from a...the observation system"). Therefore, the comparing the model of the communication to a set of adaptive models to produce a predicted action in response to the communication and comparing the predicted action with an actual action in response to the communication to produce feedback limitations are met by the references.

F.) Currently amended independent claim 82 has been considered, but is not persuasive. The claim stands rejected under 35 U.S.C. 103(a) for the same reasons given in E.) above in regards to currently amended independent claim 78.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meltin Bell whose telephone number is 703-305-0362. The examiner can normally be reached on Mon - Fri 7:30 am - 4:30 pm EST.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anil Khatri can be reached on 703-305-0282. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MB /M.B/

Wilbert L. Starks, Jr.
Primary Examiner
Art Unit - 2121